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ABSTRACT

The presentation encompasses a conceptualization of what is meant by evaluation and what is involved in evaluating training programs which prepare special educators. Specifically, evaluation is differentiated from research; Stake's general framework for evaluating educational programs is summarized; and a number of factors involved in conceptualizing the nature and scope of training program evaluation are considered, as are several critical problems related to such evaluation. Finally, some specific ideas are offered with reference to the evaluation of special education training programs. (A 7-item bibliography is included.) (Author)

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## EVALUATING TRAINING PROGRAMS IN SPECIAL EDUCATION\*

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Until recently, the question of how to evaluate, systematically and comprehensively, the nature and worth of preparation programs for the education professions generally was ignored. Currently, it is one of the most discussed and least understood concerns in the field of education. This paper encompasses an attempt to present a brief conceptual framework for understanding what is meant by the term evaluation and what is involved in evaluating programs which prepare special educators.

### Evaluation and Research Differentiated

For purposes of the following discussion, evaluation is defined as that process by which attempts are made to understand programs in order to describe, predict, explain, and make decisions, e.g., determining the over-all impact and value of a training program or of an individual professional's program. (By way of contrast, assessment is defined as that process by which an individual attempts to understand himself and other individuals in order to describe, predict, explain, and make decisions, e.g., a professional assessing himself or an exceptional child.) Stake and Denny (1969) have expressed the goal of evaluation

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as follows: "Evaluation is not a search for cause and effect, an inventory of present status, or a prediction of future success. It is something of all of these but only as they contribute to understanding substance, function, and worth."

Most writers in this area have made a distinction between evaluation and research as related to educational programs, and the distinction has been conceptualized in a number of ways. In its most basic form, evaluation may be viewed as any process by which information is gathered and judgments are made about a specific program. Often such information is non-generalizable because of the lack of appropriate standards by which appropriate relative and/or absolute comparisions might be made. In contrast, educational research which focuses on program evaluation may be viewed as a process by which information is systematically gathered using carefully controlled procedures and appropriate comparisons, thereby producing information which may have widespread implications. McIntyre, Meierhenry, Hoffman, Baldwin, and Fredericks (1969) distinguish between evaluation and research as related to education programs by conceptualizing the two as being on a continuum with informal evaluations at one end and highly controlled comprehensive research efforts at the other end.

Perhaps the greatest value of the distinction between program evaluation and research is not so much that it clarifies the conceptual difference between the two but that it clarifies the limitations of many current evaluative efforts. Ideally, all programs should be comprehensively evaluated using a research design which allows for absolute and/or relative comparisons with appropriate standards. Such formal and systematic evaluations would provide both useful feedback for a specific program and generalizable information which would be of value to others, e.g., the data collected could make a substantial contribution to efforts to deal with basic issues confronting the field of education.

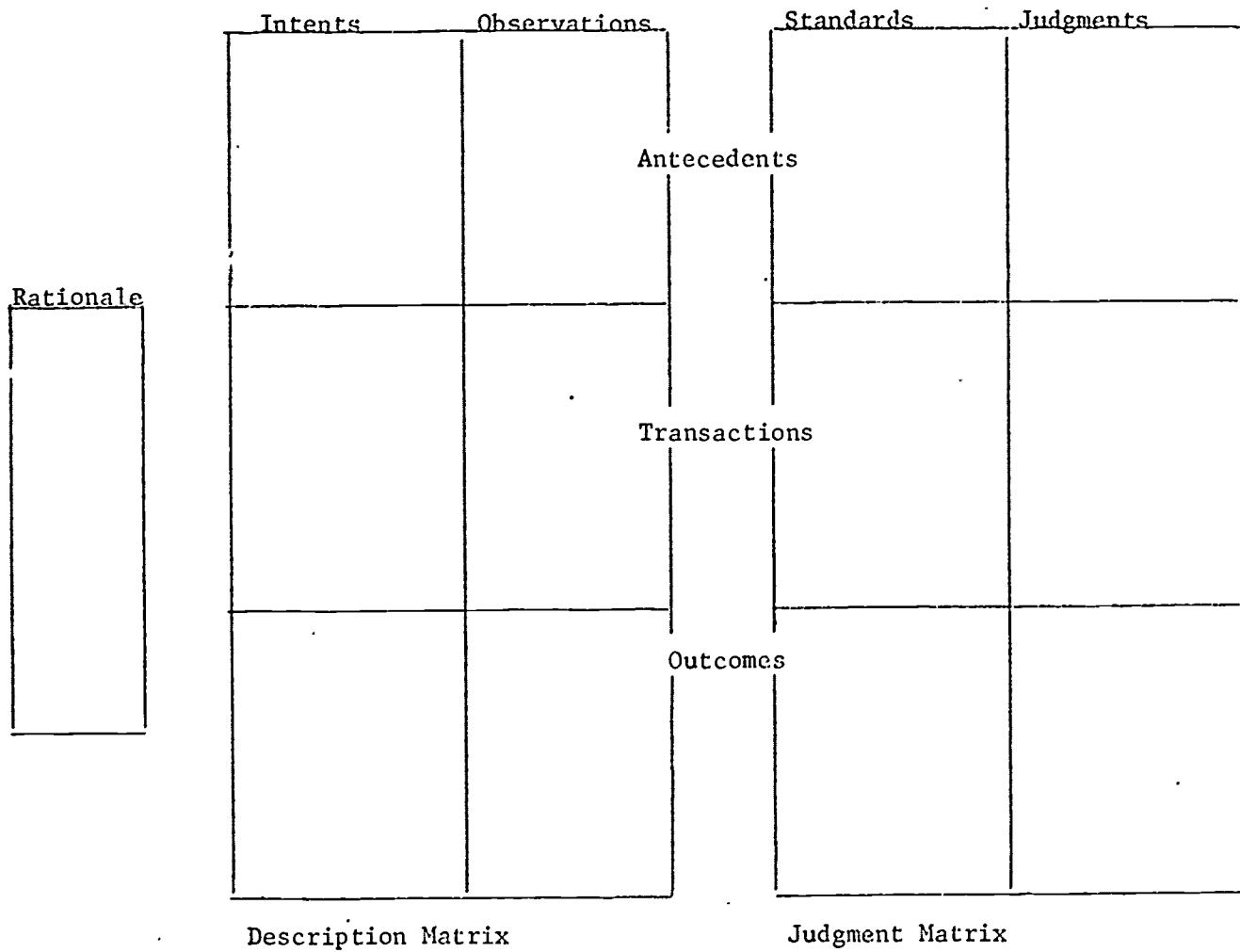
### Stake's General Framework for Evaluating Educational Programs

In conceptualizing the various facets which should be considered in attempts to evaluate current training efforts, it is helpful to begin with the general conceptual framework for evaluating educational programs which has been formulated by Robert Stake (1967).\* In brief, Stake emphasizes that "the two basic acts of evaluation" are description and judgment, and both are needed if programs are to be understood (see Figure 1). In addition, his conceptualization clarifies that, if a program is to be fully described and judged, there must be data (a) for evaluating the functional contingencies between antecedent conditions, transactions, and outcomes, (b) for evaluating the congruence between what is intended and what occurs, and (c) for making absolute comparisons (based on standards of excellence) and/or relative comparisons. Obviously, such a matrix of data would provide much of the information needed for describing, demonstrating the effectiveness of, and improving a program's basic propositions and goals, content and process, as well as for making general decisions about such programs.

### Key Factors in Evaluating Training Programs

A number of factors should be considered in conceptualizing the nature and scope of training program evaluation. First, it is clear

\*In addition to Stake's article, other literature resources with which the concerned reader might want to become familiar are: (a) the series of reports published by the UCLA Centers for the Study of Evaluation and for the Study of Evaluation on Instructional Programs; (b) the discussion of the National Assessment of Educational Progress presented in Caps Capsule (1970); (c) the process model formulated by Kaufman (1971); (d) the major volume on educational evaluation edited by Tyler (1969); and (e) the April 1970, issue of the Review of Educational Research which was devoted to educational evaluation.



A layout of statements and data to be collected by the evaluator of an educational program.

Fig. 1. Stake's graphic representation of his conceptual framework for program evaluation

that Stake's framework has direct application in efforts to evaluate programs which prepare education professionals. Such evaluation, however, encompasses the direct application of the framework not only to such a program, but also to specific district and school programs in which the training program's staff, participants, and graduates are involved. For example, in addition to investigating the impact on the trainees (such as their ability to plan and implement a special lesson), data should be gathered on the pupils with whom they work (such as whether the pupils learn the skills included in the lesson) and on the effect the program's graduates have on the districts and schools in which they are employed (such as whether they stimulate changes in basic policies regarding methods and materials).

Second, in evaluating any educational program, it is important to determine not only the congruence between what is intended and what occurs, but also to investigate possible major side effects. For example, most programs do not have well delineated objectives in the affective domain, and therefore, data often is not collected regarding the program's impact in this area. This is unfortunate since two programs which produce professionals of equal ability with reference to stated performance criteria may produce individuals with very different attitudes regarding the field of Education.

Another critical variable to be considered is the time at which the evaluation is carried out. It is evident that all formal educational programs are lengthy and that educational programming is most appropriately patterned and sequenced with reference to long range goals rather than immediate instructional objectives. Indeed, the most relevant criterion

for evaluating a program's success is the long range impact, and thus it should be recognized that the use of immediate objectives as criteria may be misleading. For example, the positive or negative impact of something learned today may only be reflected at a later time; furthermore, the fact that something is not learned at a particular moment is not tantamount to saying that it should have been learned at that moment, for it well may be that it will be more easily mastered at a subsequent time. Thus, in view of such temporal factors, it is evident that the differences between two groups of individuals from different training programs may not be apparent at the conclusion of their respective programs but may be very evident two years later.

Further complications arise from the impact of individual difference variables. For example, a procedure may prove to be more effective for an individual with a certain pattern of personality characteristics than for a person with a different pattern.

And, of course, it is necessary to consider the amount of economic support (time, staff, space, etc.) required to bring about particular effects. For example, the accomplishments of a new procedure must be evaluated with reference to cost factors in order to determine its feasibility for large scale implementation.

Finally, since all educational programs need to be improved, a comprehensive evaluation of a training program requires an investigation of the degree to which evaluative feedback is used systematically to improve various aspects of the program, e.g., content and process.

### Critical Problems Related to Evaluating Training Programs

As the preceding discussion suggests, comprehensive program evaluation is complex. In addition to this complexity, there are some serious problems which must be overcome before the comprehensive evaluation of training programs in special education can be accomplished.

Besides the very real practical problems related to attitudes toward and the financial costs of comprehensive program evaluation, there are a number of problems related to what should be measured and how to measure it. One of these critical problems stems from the failure of educators to specify competencies (knowledge, skills, and attitudes) which are to be developed by the training program. Without clearly stated behavioral objectives, those responsible for evaluating the program are seriously handicapped in their efforts (a) to establish appropriate priorities regarding what is to be investigated and what the performance indicators are to be, (b) to evaluate (sample) the congruence between what is intended and what occurs, (c) to investigate possible side effects, and so forth.

Another critical problem is that appropriate measures and procedures for evaluating some very important aspects of training programs have not been developed. And the reason for this state of affairs is not simply the absence of the knowledge and skill needed to develop them. (It seems reasonable to suggest that many program evaluators and developers of measures and procedures used in evaluative investigations tend to limit their efforts to those areas which our society values and rewards.) Whatever the reason, however, the lack of availability of appropriate measures and procedures has made it impossible, to date, to even contemplate fully evaluating an educational program.

The resolution of the above problems will require considerable time and resources, and in the meantime, program evaluation will suffer from a variety of inadequacies. This fact gives rise to another problem, i.e., a reaction against program evaluation. There are many individuals and groups who would prefer to see no evaluation rather than take a chance that a program will be evaluated in an inadequate (unreliable and/or invalid) fashion. These critics point to those instances when evaluative procedures and data have been misused and abused. For example, some special educators point to the tendency (e.g., on the part of legislators) to have special education programs evaluated primarily in terms of immediate achievement benefits to children and cost accounting procedures. (There has been a trend to judge a training program's benefits in terms of immediately measureable improvement in the "3 R's" among the children served by the personnel trained in that program; moreover, it has been suggested that the amount of improvement should be judged with reference to whether it warrants the fiscal expenditure per trainee and per pupil. On the surface, such criteria may appear to be reasonable. However, in light of our current limited knowledge regarding effective strategies for educating the majority of exceptional children, this level of evaluation is probably premature and is certainly not comprehensive enough.) Clearly, the use of such inappropriate evaluative criteria is lamentable. Equally lamentable, however, is the tendency to suggest that such misuses of the evaluative process justify the continuing absence of formal evaluation which characterizes so many special education programs. The misuses and abuses of the evaluative process do not invalidate the importance and usefulness of evaluation. Indeed,

it should be emphasized that much of the criticism which has been directed at the inadequacy of current procedures, "and the unfairness of decisions based on them, represents a localizing in the tool of the blame for the lack of clarity which characterizes the thinking of citizens of this democratic society, for it is the citizenry who determine the values and policies which direct the use of society's technical methods" (Adelman, Zimmerman, and Sperber, 1969). Thus, the reaction against program evaluation is viewed as inappropriate; this, of course, does not make the problem any less real.

Obviously other examples could be offered of problems which confront program evaluators. However, it is felt that the problems which have been discussed are, currently, the major deterrents to the comprehensive evaluation of training programs in special (and general) education.

#### Some Thoughts on Evaluating Special Education Training Programs

Within the limitations set by such problems as those which have been described above, any program should attempt to evaluate as wide a range of impact as possible using procedures and standards which allow for objective and generalizable conclusions. For example, a comprehensive evaluation might encompass an investigation of the program's impact on (1) the participants, (2) the pupils who are served directly and indirectly as a result of the efforts of the program's participants and graduates, and (3) the field in general. The primary emphasis in such an evaluation should be on describing and judging the congruence between stated instructional objectives and what is accomplished, but there also should be an investigation of possible major (positive and negative) side effects.

To be more specific about the nature and scope of such evaluative efforts, an investigation of the program's impact might focus on:

(1) the participants with particular reference to (a) the acquisition of new competencies (knowledge, skills, and attitudes), e.g., new teaching procedures, and (b) the modification of existing competencies, e.g., acceptance of personal responsibility for learning needed competencies, involvement in the field;

(2) the pupils whom they serve with particular reference to (a) the remediation of underlying process deficits, interfering behaviors, or both, e.g., perceptual deficits, extreme withdrawal and passivity, (b) the acquisition of needed pre-requisites, e.g., attending, listening, (c) achievement in basic school subjects, e.g., reading, language, mathematics, and (d) relevant other behaviors and attitudes, e.g., self-direction, self-evaluation, inter-student cooperation, feelings toward school;

(3) the field with particular reference to (a) the number of professionals, para-professionals, and recruits who are influenced directly and indirectly, (b) effects on specific school districts which probably would not have occurred if the program did not exist, e.g., changes in policies and practices related to classroom methods and materials, staffing, in-service training, and so forth which were facilitated by the program's staff, students, and/or graduates, (c) effects on specific institutions of higher education, e.g., changes in policies and practices related to pre-service training, and (d) effects on educational thought in general, e.g., changes in conceptualization regarding the purposes and processes of formal education.

Pertinent data can be gathered by employing rating scales, questionnaires, objectives tests, essays, Q sorts, systematic analyses of performance, systematic records of specific accomplishments, directly solicited evaluations, measures of such concepts as anxiety, locus of control, independence and self control, expectations and aspirations, and so forth. (Obviously, whenever possible, standardized procedures should be used.) The sources for such data range from individuals involved in the program to representatives of a variety of institutions; the most likely sources are the training program staff, the program participants, qualified individuals who are not affiliated with the program (who will be impartial), various school personnel (administrators, supervisors, teachers), pupils, parents, and subsequent employers and colleagues.

As the examples offered in this section suggest, programs which prepare special educators can and should be evaluated on many levels. In addition, it should be evident that the concerns, issues, and problems related to evaluating training programs in both general and special education are not substantitvely different and that the process of evaluating such programs is in its early developmental stages.

#### Concluding Statement

Until there is a more definitive body of knowledge in the field of special education and further development with reference to the processes by which we train professionals and evaluate such training, it seems unlikely that training programs for special educators can be evaluated satisfactorily. Nevertheless, such programs must and should be evaluated, and those responsible for the programs should be held accountable. However,

the term accountability must not be interpreted simplistically. At this time, appropriate program evaluation in special education requires more than the systematic collection of immediate achievement and cost accounting data. In particular, it is felt that programs which prepare special educators should be evaluated comprehensively in terms of their general contribution to current educational services, training, and research, rather than in terms of such narrow criteria as pupil achievement in the "3 R's" or per capita cost with reference to immediate pupil benefits. Clearly, there is a great deal which still must be learned about educating exceptional individuals, training professionals, and evaluating educational programs; we cannot afford to ignore the implications of these needs in the rush to establish strategies for accountability.

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